

## **A Flexible Distribution Device and Method for Rake Receiver of Communication System**

### **Abstract**

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The present invention is related to a flexible distribution architecture and method for rake receiver of communication system, comprising: a plurality of processing units, further, each processing unit comprises: a plurality of rake receivers, wherein each rake receiver can receive a multi-path signal from its environment and, through a recovery process, outputs a recovered signal therefrom; an combiner, which connects with the plurality of rake receivers and receives a plurality of recovered signals, then further integrates the plural recovered signals which are originated from a same source by an integration process and, consequently, outputs an integrated signal therefrom; a master processing unit, which connects with the plural processing units and, through detecting the signal received, assigns an appropriate number of rake receivers to receive signals, and further the plural integrated signals originated from a same source are integrated by an integration process and, consequently, outputs a compound signal therefrom. The aforementioned rake receivers can be subordinated to different processing units. The present invention further provides a flexible distribution method for rake receivers that are subordinate to different processing units.

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